



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/615,300

07/09/2003

Melvin D. Frerking

BS01-055-C2

7112

28970

7590

08/02/2004

SHAW PITTMAN

IP GROUP

1650 TYSONS BOULEVARD

SUITE 1300

MCLEAN, VA 22102

EXAMINER

LUK, LAWRENCE W

ART UNIT

PAPER NUMBER

2838

DATE MAILED: 08/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

q/n

Office Action Summary	Application No.	Applicant(s)	
	10/615,300	FRERKING ET AL.	
	Examiner	Art Unit	
	Lawrence W Luk	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/24/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 53-79 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 53-64 and 66-79 is/are rejected.
- 7) ☒ Claim(s) 65 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7-9-2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The indicated to Election/Restrictions are withdrawn. Rejections based on the complete search as follow.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 53-57, 75 and 76 are rejected under 35 U.S.C. 102(e) as being anticipated by Reipur et al. (2001/0000212).

As to claim 53, Reipur et al. discloses in figure 5, a portable battery recharge station comprising: a supervisory circuit (unit 3, 8, 7 and 9) associated with a voltage requirement of a secondary battery; and a voltage converter (unit 9) in communication with the supervisory circuit, (in figure 5, unit 7, 9 & 10 and Abstract) wherein when the secondary battery is in contact with the supervisory circuit, the supervisory circuit instructs the voltage converter to supply a voltage to the secondary battery in accordance with the voltage requirement.

As to claim 54, Reipur et al. discloses in figure 5, a holder (unit 4 & 5) configured to receive the secondary battery.

As to claim 55, Reipur et al. discloses in figure 5, a socket (unit 1) configured to receive the secondary battery.

As to claim 56, Reipur et al. discloses in figure 5 and Abstract, the voltage converter is configured to receive power from a power source, converts the power in accordance with the voltage requirement, and supplies the converted power to the secondary battery.

As to claim 57, Reipur et al. discloses in figure 5, the power source is an electrical outlet (unit 1).

As to claim 75, Reipur et al. discloses in figure 5 and Abstract, a method for recharging secondary batteries comprising: obtaining a voltage requirement of a secondary battery; and instructing a voltage converter to receive power from a power source, converting the power to meet the voltage requirement, and supplying the converted power to the secondary battery.

As to claim 76, Reipur et al. discloses in figure 5, the obtaining involves a supervisory circuit unit (3, 8, 7 and 9).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 58-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reipur et al. (2001/0000212) in combination with Goldman (5,121,044).

As to claim 58, Reipur et al. discloses the elements as claims, except for the power source is a vehicular battery.

Goldman discloses in figure 1, for the power source is a vehicular battery (unit 14).

It would have been obvious to person having ordinary skill in the art at the time of the invention was made to modify the device of Reipur et al. to include the power source is a vehicular battery as taught by Godman for electrical energy systems incorporating electric vehicles.

As to claim 59, Reipur et al. in view of Goldman are applied supra, and Goldman further disclose in column 2, lines 34-38, the power source is one of a replaceable battery, a rechargeable battery, a renewable battery, and a renewable fuel cell.

As to claim 60, Reipur et al. in view of Goldman are applied supra, and Goldman further disclose in column 3, lines 48-52, the replaceable battery is one of an alkaline battery, a lithium battery, and a zinc-air battery.

As to claim 61, Reipur et al. in view of Goldman are applied supra, and Goldman further disclose in column 4, lines 13-24, the rechargeable battery is one of a NiCd battery, a NiH₂ battery, a NiMH battery, a Li-ion battery, a Li-polymer battery, a zinc-air battery, and a lead acid battery.

As to claim 62, Reipur et al. in view of Goldman are applied supra, and Reipur et al. further disclose in figure 5, the recharger is adapted to receiver energy from an external power source (220).

As to claim 63, Reipur et al. in view of Goldman are applied supra, and Goldman further disclose in column 3, line 48, the renewable fuel cell is one of a methanol fuel cell and a renewable electrolyte type cell (unit 16).

As to claim 64, Reipur et al. in view of Goldman are applied supra, and Goldman further disclose in column 3, line 48, a reservoir adapted to contain fuel of the renewable battery (unit 16).

5. Claims 66-68 and 77-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reipur et al. (2001/0000212) in combination with McClure et al. (5,198,743).

As to claim 66, Reipur et al. discloses the elements as claims, except for a programming resistor.

McClure et al. discloses in figure 1, column 5, lines 13-36, the supervisory circuit determines a voltage requirement of the secondary battery based on a resistance value of the programming resistor.

It would have been obvious to person having ordinary skill in the art at the time of the invention was made to modify the device of Reipur et al. to include the determines a voltage requirement of the secondary battery based on a resistance value of the programming resistor as taught by McClure et al. for providing battery chargers to obtain highly reliable and accurate operation.

As to claim 67, Reipur et al. in view of McClure et al. are applied supra, and Reipur et al. further disclose in figure 5 and Abstract, the voltage converter receives

power from a power source, converts the power in accordance with the voltage requirement, and supplies the converted power to the secondary battery.

As to claim 68, Reipur et al. in view of McClure et al. are applied supra, and Reipur et al. further disclose in figure 5, the power source is an electrical outlet (220).

As to claim 77, Reipur et al. in view of McClure et al. are applied supra, and McClure et al. further disclose in figure 1, column 5, lines 13-36, the obtaining involves a programming resistor.

As to claim 78, Reipur et al. in view of McClure et al. are applied supra, and McClure et al. further disclose in figure 1, column 5, lines 13-36, the programming resistor is associated with the secondary battery.

As to claim 79, Reipur et al. in view of McClure et al. are applied supra, and McClure et al. further disclose in figure 1, column 5, lines 13-36, the programming resistor is associated with a device-specific charging cord that is connected to a device housing the secondary battery.

7. Claims 69-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reipur et al. (2001/0000212) and McClure et al. (5,198,743) as discussed above, and further in combination with Goldman (5,121,044).

As to claim 69, Reipur et al. and McClure et al. disclose the elements as claimed, except for the power source is a vehicular battery.

Goldman discloses in figure 1, for the power source is a vehicular battery (unit 14).

It would have been obvious to person having ordinary skill in the art at the time of the invention was made to modify the device of Reipur et al. and McClure et al. to include the power source is a vehicular battery as taught by Goldman for electrical energy systems incorporating electric vehicles.

As to claim 70, Reipur et al. and McClure et al. in view of Goldman are applied supra, and Goldman further disclose in column 2, lines 34-38, the power source is one of a replaceable battery, a rechargeable battery, a renewable battery, and a renewable fuel cell.

As to claim 71, Reipur et al. and McClure et al. in view of Goldman are applied supra, and Goldman further disclose in column 3, lines 48-52, the replaceable battery is one of an alkaline battery, a lithium battery, and a zinc-air battery.

As to claim 72, Reipur et al. and McClure et al. in view of Goldman are applied supra, and Goldman further disclose in column 4, lines 13-24, the rechargeable battery is one of a NiCd battery, a NiH₂ battery, a NiMH battery, a Li-ion battery, a Li-polymer battery, a zinc-air battery, and a lead acid battery.

As to claim 73, Reipur et al. and McClure et al. in view of Goldman are applied supra, and Reipur et al. further disclose in figure 5, the recharger is adapted to receiver energy from an external power source (220).

As to claim 74, Reipur et al. and McClure et al. in view of Goldman are applied supra, and Goldman further disclose in column 3, line 48, the renewable fuel cell is one of a methanol fuel cell and a renewable electrolyte type cell (unit 16).

Allowable Subject Matter

8. Claim 65 is objected to as being dependent upon a rejected base claim. The prior art of record fails to teach or reasonably suggest that a gauge adapted to measure a level of the fuel. Claim 65 would be allowable if rewritten in if rewritten in independent from including all of the limitations of the base claim.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence W Luk whose telephone number is (571)272-2080. The examiner can normally be reached on 7 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571)272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LWL
July 13, 2004

Lawrence W Luk
examiner
7/13/04